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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,020	04/20/2004	Shigeru Hosoe	02860.0707-01	7081

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER	
LOPEZ, CARLOS N	

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/829,020	HOSOE, SHIGERU	
	Examiner	Art Unit	
	Carlos Lopez	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 36-57 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 36-57 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 20 April 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/079,498.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 51-57 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 51-57 merely further define the intended use of the produced mold without further defining the subject matter of parent claim 1 drawn to a method of making a molding die.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 50-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the intended use limitations in claims 51-57 further define the positive active steps of making a molding die. What positive active step is being sought for patentable protection?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 36-37, 42-43, 44-46, 49-57 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 10-217 257 ('257), for which the machine translation is being referred. '257 discloses a method of making molds with amorphous metal alloy/ metal glass. The method comprises heating the metal glass to its supercooled liquid region and then shape the glass with a master member die 4 (see abstract). Machine translation of '257, paragraph 5 and 22 disclose an amorphous alloy mold base 1a and 1b having a super-cooled liquid phase containing, among other elements, aluminum at a 10mol%. The claimed die face is deemed as cavity section 8, formed by the pressing of master die 4 onto mold base 1a, and wherein the claimed reference surface is deemed as the surface of the mold surrounding the cavity section 8.

As for claim 42-43, '257 notes that the hardness HV is noted as 510, see machine translation paragraph 22.

As for claims 45, see machine translation paragraph 22 disclosing the claimed mol%.

As for claims 46, the insertion of the master die into the metal glass alloy and thus form protrusions on the die face is deemed as the claimed exposing step.

As for claim 49, see above.

As for claim 50, the protrusions shown in the figures of '257 would be transferred to a glass if the mold is used as a glass molding die.

Additionally, claims 50-57, said limitations are not positive active steps but instead are intended use limitations that only further define the use of the molding die which do not pertain to a method of making a molding die as instantly claimed. Nor does the intended use limitations provide a positive active step that would patentably distinguish the claimed method from the method disclosed by '257.

Claim 44 rejected under 35 U.S.C. 103(a) as unpatentable over JP 10-217 257 ('257), the machine translation is being referred, as applied to claim 1 above and in further view of Inoue et al (US 6,521,058). '257 is silent adding palladium to the amorphous alloy composition. However, Inoue teaches that adding palladium to the composition of an alloy, strengthens it (Col.3, lines 3-8). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to have added palladium to the alloy composition of '257 in order to strength the resultant mold.

In regards to the claimed of palladium amount, it would have been obvious to a person of ordinary skill in the art to conduct routine experiments to determine the optimum amount of palladium added to the alloy composition in view of Inoue teaches that palladium strengthens alloys.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 36, 44-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,766,999 ('999). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 3 of '999 recites the claimed method of making a mold die for an optical element having an amorphous alloy palladium and aluminum by shaping. While claim 3 does not disclose forming a die face, it is obvious to a person of ordinary skill in the art that the mold would have a die face and thus the claimed step of making die face is an inherent or would be obvious to have expected to be made as the glass mold die is formed.

As for claims 44-45, the claimed %mol are disclosed in claim 3 of '699.

Claims 36-57 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 36,38-48, and 50-51 of copending Application No. 11/364,211 ('211). Although the conflicting claims are not identical, they are not patentably distinct from each other because the steps recited in claims 36 comprise of the claimed shaping of an amorphous alloy and forming a face die which is claimed by '211 as a reference surface.

As for claim 37 and 49, claim 36 of '211 shapes the mold by softening and pressing steps.

As for claims 38-39, claim 38 of '211 notes of using a processing machine with a diamond cutting tool, hence showing that the processing machine grinds the mold body.

As for claim 40-41 and 48, claim 38 of '211 notes of cutting the die base body with a diamond cutting tool.

As for claim 42-43, claims 47-48 of '211 disclose the claimed hardness.

As for claims 44-45, claims 50-51 of '211 disclose the claimed %mol.

As for claims 46-47, the shaving of the mold body with the claimed processing tool of '211 provides for the claimed exposing and developing of the die face.

As for claims 50-57, claim 39-46 of '211 disclose the claimed properties transferred to the optical element.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references in PTO-892 and not applied in the above rejections have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am.- 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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